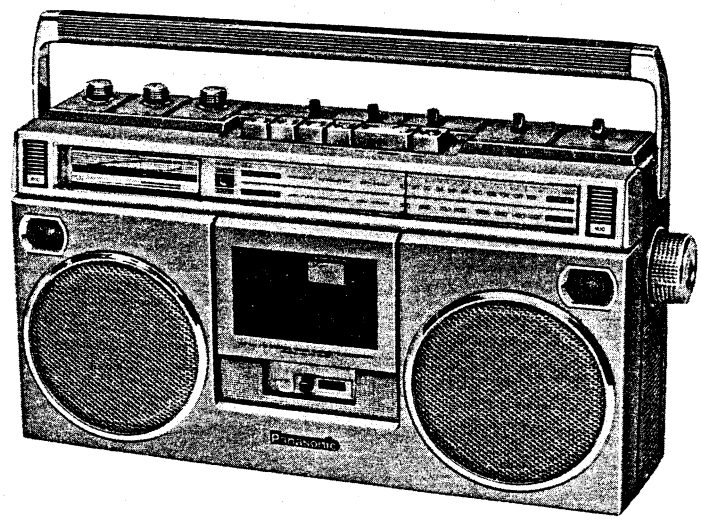
ORDER NO. RD7902-1654C

Service Manual

Radio Cassette

RX-5090

Stereo Cassette Recorder with FM/AM Radio



RQ-544 MECHANISM SERIES

Specifications

Power requirement:	AC; 100~110/115~127/200~220/230~250V 50/60 Hz Power consumption; 10W Battery; 9 V (six- "D" size dry batteries) Car/boat battery; with optional car/boat adaptor RP-917
Motor:	Mechanical governor motor
Operation:	Push button one-touch recording with Auto-Stop and mechanical pause
Tape speed:	$1\frac{7}{8}$ ips.
Program time:	1 hour with C-60 cassette tape
Track system:	4-track 2-channel stereo recording and playback
Input:	MIC; sensitivity 0.25mV/ applicable microphone impedance 200~600Ω LINE IN; sensitivity 63mV DC IN; 9 V
Output:	LINE OUT; 0.36 V/load impedance 50kΩ over EXT SP; 3~8Ω HEADPHONE; 8Ω REMOTE: for start and stop at hand
Speaker:	Woofer 12cm (5") PM dynamic speaker Tweeter 3cm ($\frac{17}{32}$") PM dynamic speaker
Radio frequency range:	FM; 88~108 MHz AM; 525~1605 kHz (571~187 m)
Intermediate frequency:	FM; 10.7 MHz AM; 455 kHz
Sensitivity:	FM; 2μV/50mV output AM; 100μV/m/50mW output
Dimensions:	$16\frac{1}{2}$"(W) × 9"(H) × $5\frac{5}{8}$"(D) (419 × 229 × 142mm)
Weight:	4.4 kg (9 lbs. 11 oz) (without batteries)

Specifications are subject to change without notice.

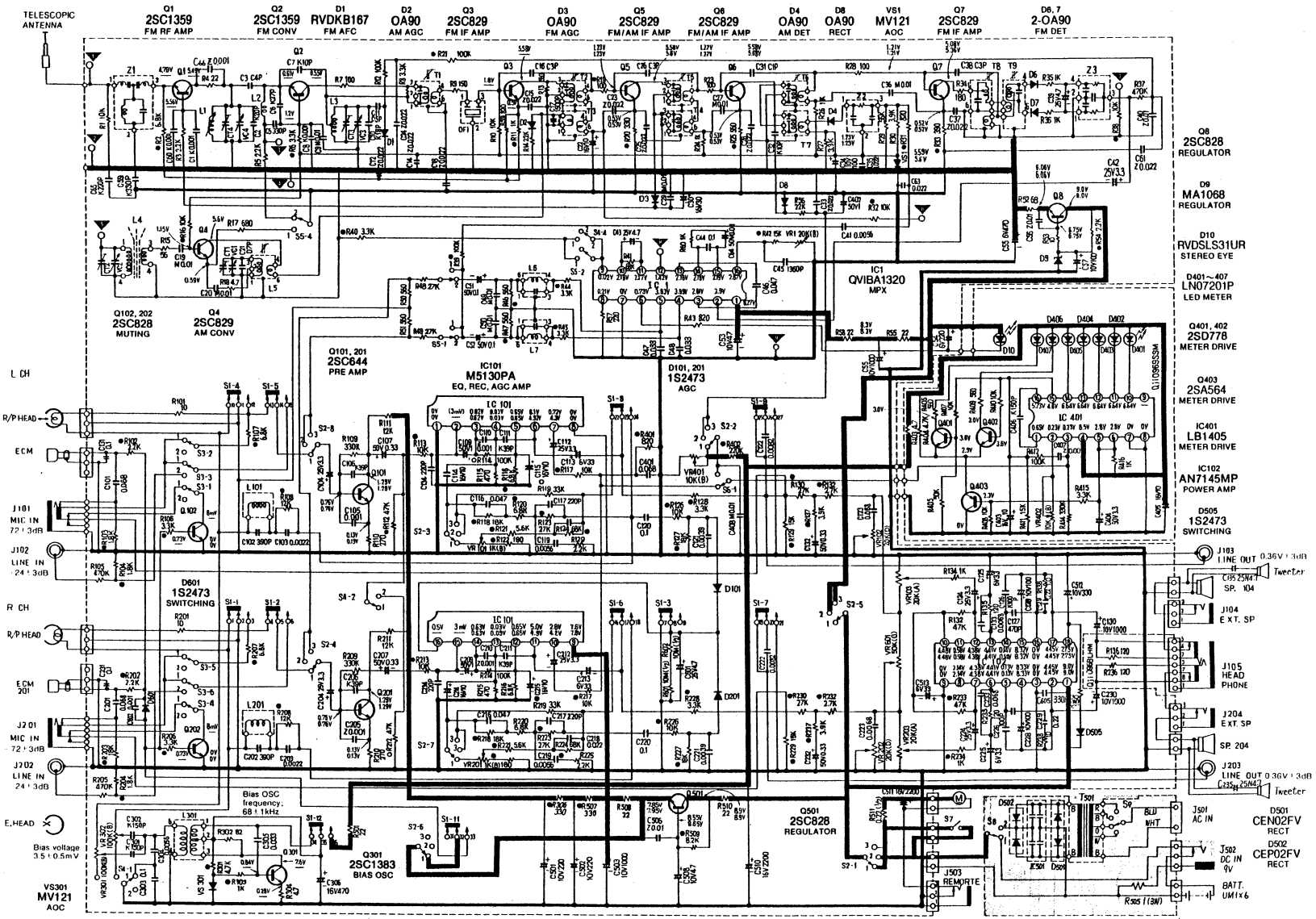
Panasonic®

Panasonic Company
Division of Matsushita Electric
Corporation of America
One Panasonic Way, Secaucus, N.J. 07094

Panasonic Hawaii, Inc.
320 Waiakamilo Road, Honolulu, Hawaii 96817

Matsushita Electric of Canada Ltd.
5770 Ambler Drive. Mississauga, Ontario, L4W 2K9

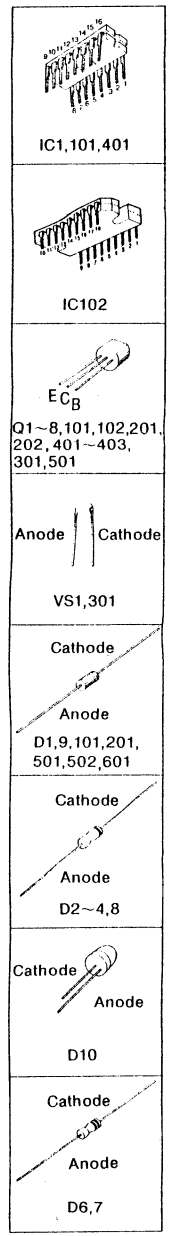
Schematic Diagram – Model RX-5090



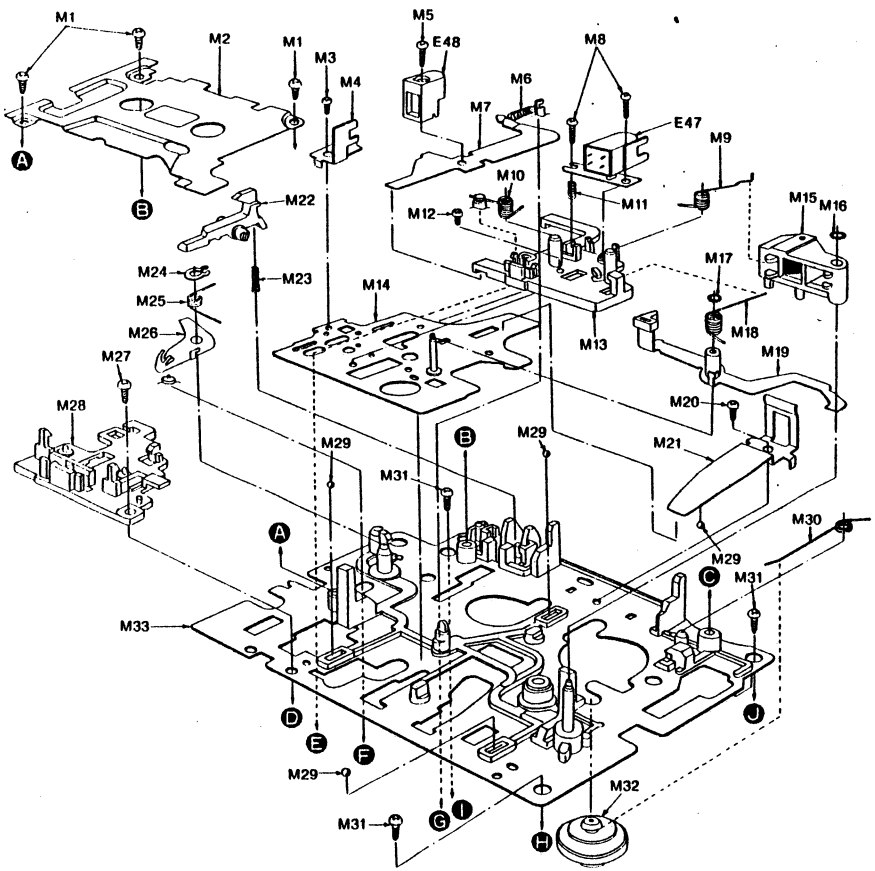
1. S_{1-1}~S_{1-12}: Record/Playback select switch in "Playback" position.
2. S_{2-1}~S_{2-8}: Function switch. (1...Tape, 2...Radio, 3...Sleep)
3. S_{3-1}~S_{3-6}: Input select switch and playback mixing switch. (1...MIC/MIX ON, 2...LINE/MIX OFF)
4. S_{4-1}~S_{4-4}: Mode/beat proof switch (1...Stereo, 2...Mono).
5. S_{5-1}~S_{5-4}: Band switch (1...AM, 2...FM)
6. S_{6-1}, S_{6-2}: Meter switch. (1...Battery and tuning, 2...Level)
7. S_7: Motor switch.
8. S_8: AC/DC select switch
9. S_9: AC voltage select switch.
10. The mark (●) shows printed resistor.
11. DC voltage measurements are taken with Electronics Voltmeter from negative terminal of battery.
    The upper values should be measured during FM (Radio circuit).
    The upper values should be measured during recording (Audio circuit).

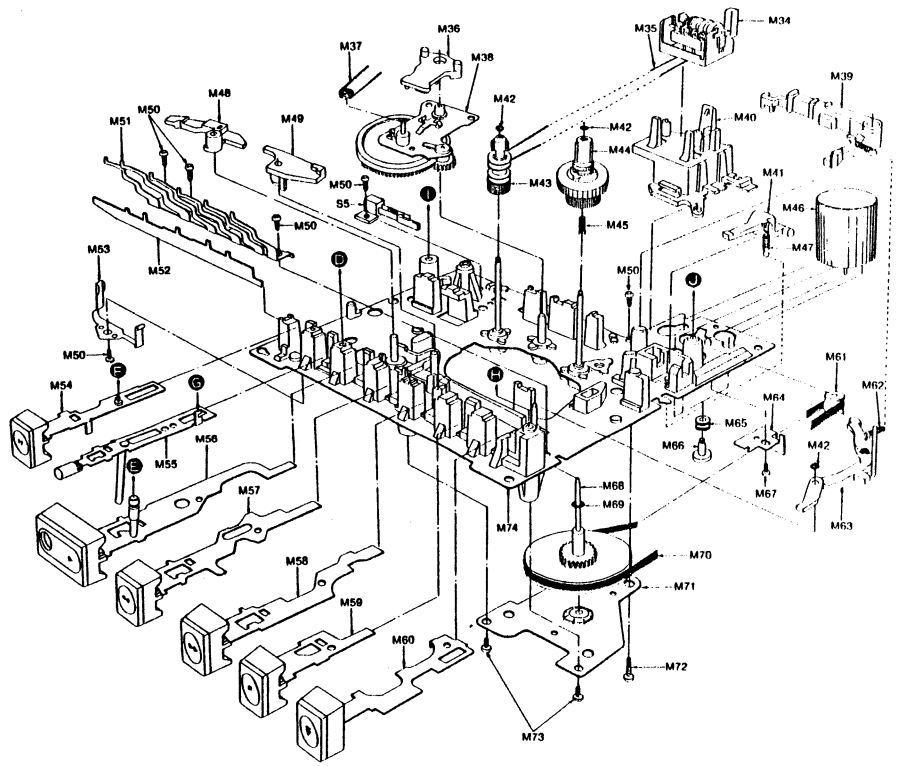
IMPORTANT SAFETY NOTICE

THE SHADED AREA ON THIS SCHEMATIC DIAGRAM INCORPORATES SPECIAL FEATURES IMPORTANT FOR SAFETY.
WHEN SERVICING IT IS ESSENTIAL THAT ONLY MANUFACTURER'S SPECIFIED PARTS BE USED FOR THE CRITICAL COMPONENTS IN THE SHADED AREAS OF THE SCHEMATIC.



EXPLODED VIEWS





CABINET PARTS LOCATION